# Medi-Cal Management Information System and Decision Support System (MIS/DSS)

# Data Enhancement Functional Specifications

# for Capitation Payment Table

# Phase 5



**March 23, 2000**

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# 1. Overview

Capitation data will be provided to the MEDSTAT Group by the Department of Health Services. The Capitation data includes the invoiced capitation amounts paid to health care plans. Each record represents the amount paid to a plan for a given aid code, month, and number of members (Member Months).  The data is then processed and loaded into the Capitation DataScan table, a custom table created for the Medi-Cal MIS/DSS project, and an extract of this file is created and loaded into Panorama View in an aggregate form.  Because of the confidentiality of its data, the Capitation DataScan table is *not* available to all users.  The list of authorized users will be supplied by the Department of Health Services.

Figure 1 gives a high-level view of the major conversion processes and helps illustrate the relationship between the processes.  The shaded box represents the conversion process being discussed in this section.
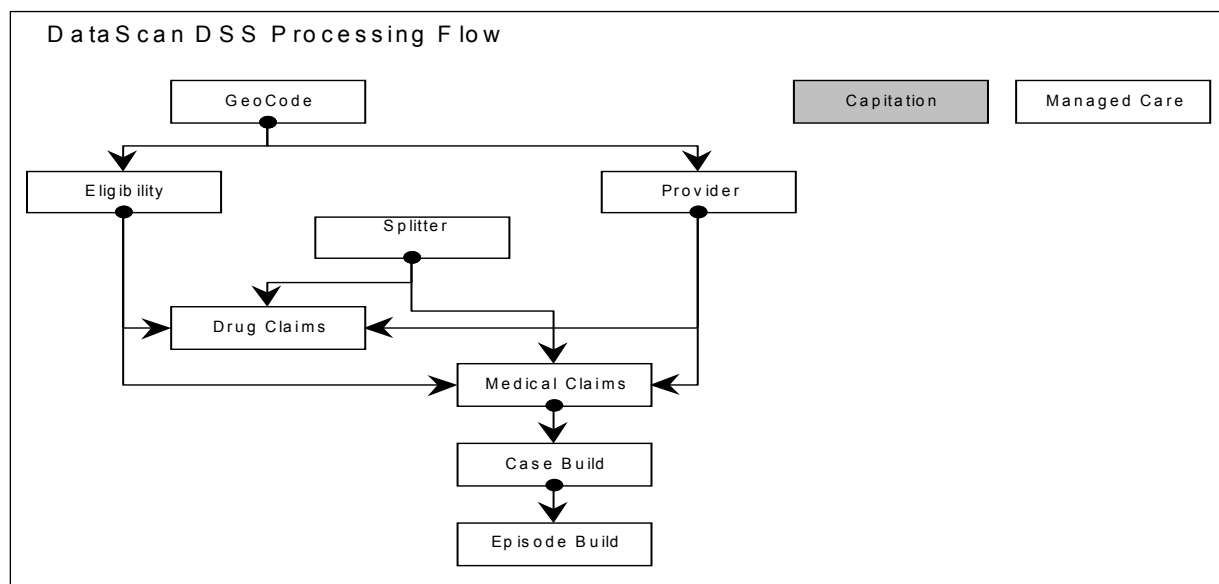


Figure 1.  DataScan DSS Processing Flow

# 2. Prerequisites / Pre-Conversion

This data does not have any prerequisites and does not need to be pre-converted.

## 3. Indexes

There are no indices set on the Capitation Table because of its small size.  As the table size and utilization increases, indexing will be evaluated and implemented if necessary.

## 4. Input Data

- All values on the input file will be positive.

- Input file layouts can be found in Attachment 1.

- The following matrix describes notable characteristics of the input data:

| Field Name | Description |
|---|---|
| CAP-PHP-CODE | The 3-digit Prepaid Health Plan Code. |
| CAP-PAYMENT-DATE | This is not the check date, but the date of the invoice. |
| CAP-SERVICE-DATE | The month/year of coverage for the initial capitation payment (The initial capitation payment is indicated when the adjustment indicator on the input file is <space>).<br><br>For adjustments (both positive and negative adjustments), CAP-SERVICE-DATE indicates the month in which the adjustment is applicable to.  It is NOT the month/year the adjustment has been made. For example, an adjustment for a May 1997 capitation service month may appear on any record with a later payment date. |
| CAP-PHP-COUNTY | The 2-digit county code of the Prepaid Health Plan. |
| CAP-AID-CODE | The aid code covered by this record. |
| CAP-ADJUSTMENT-INDICATOR | The adjustment indicators that identify initial payments, and negative or positive adjustments.  The ADJCAP map identifies all the valid value. |

| Field Name | Description |
|---|---|
| CAP-NBR-MEMBER-MNTHS | For CAP-ADJUSTMENT INDICATOR = <space>, This field would contain the number of eligibles covered by the capitation payment. <br><br> For CAP-ADJUSTMENT INDICATOR = 1 or 2, This field would contain the number of member months for the adjustment |
| CAP-NET-PAYMENT | The check amount of the capitation payment for the specified record. <br><br> This field does carry pennies. |

## 5.  Output Data

- The output field NETPAY does *not* carry pennies.

- Negative adjustments will have a negative value in MBRMOS and NETPAY.

- The following fields are maintained only for Panorama View and will be hidden in DataScan®:

  - ♦ CLMTYPE  - Claim Type

  - ♦ PROVSPEC – Provider Specialty

  - ♦ VENDORCD – Vendor Code

  - ♦ SVCCAT – Service Category

## 6.  Reports

The Capitation Convert Program will produce three reports: the Aggregate Statistics Report, the Failed Operations Log (FOLOG) Report, and the Unexpected Values Report.  Samples of these reports are included as attachments.

## 6.1   Aggregate Statistics Report

The Aggregate Statistics Report will document all records that were dropped because of incomplete information or field values that did not fall within a pre-defined range.  The Aggregate Statistics Report will include:

- Total number of records received

- Subtotal of records dropped and the reason they were dropped

  (For Capitation, records are subtotaled by NETPAY)

- Total of the records dropped

- Total of the records converted

## 6.2   Failed Operations Log (FOLOG) Report

The FOLOG Report will document records that have not been dropped but fail while converting raw input data into the format required for DataScan.  One or more input fields that were not in the expected format (e.g., invalid data or non-numeric data in a numeric field) may cause the failure.  The FOLOG Report will include:

The FOLOG Report will include:

- Field name

- Operation Number

- Description of the operation that failed

- Unmapped/undefined values found for that operation

- Count of the number of records with possible errors for that operation

- Percent of Total Records

- NETPAY amount associated with each failed value

- Percent of total NETPAY associated with each failed value

The types of problems that the FOLOG report can highlight are:

- Wrong input file was converted.

- Wrong conversion program was run against the input file.

- Input file format changed.

- Unmapped fields or field values were in the input data.

- Incoming input data values were all blanks or zeros.

- Unexpected field values were present in the input data.

- Improper records were dropped.

NOTE: Refer to the Field Level Detail for more specific information on the FOLOG calls individual fields that are reported on the FOLOG Report.

## 6.3  Unexpected Values Report

The Unexpected Values Report will be very similar to the FOLOG Report with several additions and will:

- Indicate when a failed value has been previously reported to the State and they have indicated that it is in fact a failure

- List the unmapped/undefined values found for each operation by PHPCODE

The fields on the Unexpected Values Report are a subset of the FOLOG Report and are driven by two Excel spreadsheets.  The first spreadsheet is a list of FOLOG operation numbers to be included in the report.  The second is a list of previously approved values to map to other/invalid for each operation number.  The State has the responsibility of determining fields (of those listed in the FOLOG Report) to include in the Unexpected Values Report.

## 7.  Selection / Drop Criteria

Inclusion/exclusion criteria processing occurs at the beginning of the Capitation process, before any of the steps listed in the high-level process flow section.

Each drop condition will be identified separately on the Aggregate Statistics Report or on a separate build report.

## 7.1   Capitation Payment Date Format Invalid

Drop records if the Capitation Payment Date (CAP-PAYMENT-DATE) is not a valid date.

## 7.2   Capitation Payment Date Outside the Database Window

The DataScan database stores 30 months of paid data.  During each monthly update the window moves up a month, with a new month of paid data being added, and the oldest month rolling off. Drop records where the Capitation Payment Date (CAP-PAYMENT-DATE) is earlier or later than the 30-month database window.

## 7.3   Eligible County Invalid

Drop records when the Eligible County (CAP-PHP-COUNTY) is not validated against the ELIGCNTY map, matching on: CAP-PHP-COUNTY = ELIGCNTY Code.

## 7.4   Aid Code Invalid

Drop records when the Aid Code (CAP-AID-CODE) is not validated against the ELIGCAT map, matching on: CAP-AID-CODE = ELIGCAT Aid Code.  The ELIGCAT map contains a list of valid Federally Funded Program (FFP) Aid Codes to be included in the MIS/DSS.

## 7.5   Member Months Invalid

Drop records if the number of member months (CAP-NBR-MEMBER-MNTHS) is not numeric. Drop records if the number of member months (CAP-NBR-MEMBER-MNTHS) is equal to zero and the adjustment indicator (CAP-ADJUSTMENT-INDICATOR) is a value of space, 1 or 2. Other adjustment indicator values represent withholds and paybacks and may have a member months value equal to zero and will not have an aid code value.

## 7.6   Capitation Payment Invalid

Drop records if the payment amount (CAP-PAYMENT) is invalid.  The payment amount is considered invalid for any of the following conditions:

- Is not numeric

- Is equal to zero

- Is larger than the allowable amount  (999,999,999.00)

## 7.7  Duplicate Records

Check for records that are duplicated.  After all the field level conversions have been performed, if the combination of key fields is identical, the duplicated record is dropped.  The key fields are:

- PHPCODE, PDDATE, SVCDATE, ELIGCNTY, AIDCODE, ADJCAP, MBRMOS, NETPAY

# 8.  Process Flow / Data Enhancements

- If the converted ADJIND field is a '1' (negative adjustment), the fields MBRMOS (Total Member Months) and NETPAY will be negated.

- The input field CAP-NET-PAYMENT does carry pennies and the output field NETPAY does *not* carry pennies. Therefore, rounding will occur during the data conversion process.

- The fields CAP-PHP-CODE and CAP-AID-CODE are left justified and blank filled and must be right justified and zero filled before any conversion processing occurs.

# 9.  New Installation Considerations

There are no installation considerations, including special processing to consider.

# 10.  Update Processing Considerations

MEDSTAT receives a monthly update file from the State for Capitation. This file contains the most recent month of processed capitation data and can include numerous values in the PDDATE field.  The Capitation Update Process is as follows:

- The monthly update file is processed by the Capitation Convert Program using the RUNDATE parameter that indicates update processing.  When the RUNDATE parameter specifies an update, the convert program verifies the PDDATE is within the 30-month window.

- Copy the current production Capitation Table to a worktable.

- Add the converted data into the worktable.

  If a duplicate (based on key fields in Section 7) is found on both the current production table and the converted data, the record from the production table (first received) will be retained and the record from the converted data will be deleted.

  This differs from the Managed Care Plan Financials conversion update process, which chooses the record "last received" for retention, because we are checking for duplicates by using all of the primary key identifier fields (PHPCODE, PDDATE, SVCDATE, ELIGCNTY, AIDCODE and ADJCAP) and all of the value fields (MBRMOS and NETPAY).  In the Capitation conversion update process, we are trying to prevent duplicate values, whereas in the Managed Care Plan Financials conversion update process we check for duplicates using only the primary key identifier fields and are replacing the value fields with new data.

- Send the converted monthly update file to Panorama View.

- Delete data from the Work Table that is prior to the 30-month database window.

- Verify the worktable and if correct, continue to the next step.  Otherwise, research and correct.

- Copy the worktable to the Production Capitation Table. (If possible, this should be concurrent with the "flipping of the switch" to the new database window)

- Verify the new Production Capitation Table and if correct, approve release of table to the user.

## 11.  Maps and Validation Tables

Maps are used to validate source values before moving them as DataScan® output or to look up values for the DataScan® output based on source values.  Each map should be sorted by the source values before the conversion program is executed.  It is recommended that a map be sorted each time it is updated.   Hardcopy and Softcopy (for very large maps) of these maps are provided in the Maps section of the System Design Deliverable.  Maps used in Capitation processing include:

| Map | Fields | Purpose |
|---|---|---|
| ELIGCAT | AIDCODE | Used in Selection/Drop Criteria (See Prior section) |
| | ELIGCAT | Used to obtain value for ELIGCAT using AIDCODE |
| ELIGCNTY | ELIGCNTY | Used in Selection/Drop Criteria (See Prior section) |

| Map | Fields | Purpose |
|---|---|---|
| ADJCAP | ADJCAP<br><br>ADJIND | Used to validate the ADJCAP value and to assign the MEDSTAT ADJIND field. Also used to determine whether the MBRMOS and NETPAY fields are positive or negative values. |
| CDBFOLOE | N/A | Failed Operations Log (FOLOG) Report – FOLOG operation numbers to be included in the report. |
| FLGKEYCA | N/A | Used by the Unexpected Values Report – FOLOG operation numbers to be included in the report |
| FLGAPRCA | N/A | Used by the Unexpected Values Report – values approved to map to other/invalid |
| NETPROD | PHPCODE | Used to validate PHPCODE |
|  | NETWORK | Used to obtain value for NETWORK using PHPCODE |

## 12.  Tagging

There are no fields that have values tagged from other tables.

## 13.  Summary of Document Changes

| Date | Author | Phase | IRs | Description of Changes |
|---|---|---|---|---|
| 03/09/00 | T. Wright | 5 | N/A | Changed wording in section 6, Reports from: "The Capitation Convert Program will produce two reports…" to : "The Capitation Convert Program will produce three reports…". |
| 8/27/99 | K. Key | 5 | 1034 | In the Maps and Validation Tables section, removed MBRMOS and NETPAY as fields that use the ADJCAP map. |
| 8/27/99 | K. Key | 5 | 1207 | In the Update Process Considerations section, added an explanation as to why the retention of records (first vs. last) is different from the Managed Care Plan Financials conversion update process. |
| 8/27/99 | K. Key | 5 | N/A | Clarified the description of Cap-Service-Date, under |

| Date | Author | Phase | IRs | Description of Changes |
|------|--------|-------|-----|------------------------|
| | | | | the Input Data Section, to say that the adjustment is the month it is applicable to, not the month is made. |
| 8/24/99 | K. Key | 5 | 1207 | Added drop condition for duplicate records. |
| | | | | Deleted item under Process Flow about each unique PHPCODE, PDDATE, SVCDATE,ELIGCNTY, and AIDCODE combination being able to have only one adjustment indicator. |
| | | | | Modified the item under Process Flow to indicate the MBRMOS and NETPAY will be negated in the converted ADJIND is '1'. |
| | | | | Modified Update Processing Considerations section to add duplicate record checking when adding the converted data into the work table. |
| 8/24/99 | K. Key | 5 | 1317 | Removed the drop condition for dental PHP Codes. |
| 8/23/99 | K. Key | 5 | 1368 | Added section for new Unexpected Values Report. |
| | | | | Added sample report as attachment. |
| | | | | Updated Maps and Validation Tables section with CDBFOLOE, FLGKEYCA and FLGAPRCA. |
| 8/23/99 | K. Key | 5 | 1034 | Modified the drop condition for MBRMOS=0 to only drop when the input ADJIND is blank, 1 or 2.  The other ADJIND codes represent withholds and paybacks and may have MBRMOS=0 and not have an aid code. |
| | | | | Added CAPCV-ADJ-CAP to the Capitation Load File Layout (CRCCAPP2). |
| 8/20/99 | K. Key | 5 | 1468 | Moved remaining drop conditions (Eligible County Invalid and Aid Code Invalid) from the phase-specific drop logic document to the Capitation background document. Removed county restrictions when validating aid code against the ELIGCAT map. |
| | | | | Removed references to AFDCAID map.  The use of |

| Date | Author | Phase | IRs | Description of Changes |
|------|--------|-------|-----|------------------------|
| | | | | the AFDCAID map to identify TANF codes ceased beginning with Phase 5, because all aid codes are being accepted for all counties. |
| 4/28/99 | K. Key | 4 | 1362 | Reordered section 7, Selection/Drop Criteria, to be in the same order that the drops actually occur.  Added another drop criteria for Capitation Payment Dates that are not valid dates. |
| | | | | Updated attachment of sample Aggregate Statistics Report to reflect the new drop criteria category and the reordering of the counts. |
| 2/4/99 | K. Key | 4 | N/A | Added output file record layout attachment. |
| 2/4/99 | K. Key | 3 | 1231 | Updated input file record layout attachment. |
| 1/28/99 | K. Key | 3 | 1231 | Reformatted section 7, Selection/Drop Criteria. |
| | | | | Corrected amount of allowable amount on drop condition for payment amount (from 999,999,999.99 to 999,999,999.00). |
| | | | | Added new drop condition for Dental PHP Codes (400-408 and 681-684).  Updated sample Aggregate Statistics Report to display new drop condition. |
| 1/25/99 | K. Key | 4 | N/A | Added attachments of sample reports. |
| 1/15/99 | C. Hubbert | 4 | N/A | Modification to Section 10 – Update processing considerations because of State Walkthrough. |
| 12/31/98 | C. Hubbert | 4 | 739 | Reformatted background document into standardized format |
| 11/24/98 | C. Hubbert | 3 | 723 | Included Section on Monthly  Update |
| 11/23/98 | C. Hubbert | 3 | 996 | Changed NONFFPAIDCODE Map to AFDCAID Map in Mapping Section ; Added Revision Log |
| 6/12/98 | C. Hubbert, J. Dittman | 3 | | New Document. |

# Attachment 1.   Sample Aggregate Statistics Report

```
CSBSTAT                              MEDI-CAL                                PAGE :    1
                AGGREGATE STATISTICS FOR CAPITATION PAYMENTS FROM 06/01/96   TO 11/30/98   DATE : 03/23/1999
                                                                            TIME : 14:43:05

                       # OF RECS        PAY-AMT
------------------------------------------------------------------------------------------------------------
# RECS READ               25,330   3,613,713,729.16
------------------------------------------------------------------------------------------------------------
PHPCODE DENTAL|INVALID      3,267      57,374,893.00
PAID DATE FORMAT INVALID
PAID DATE OUTSIDE RANGE     2,880     397,872,531.86
COUNTY NOT IN ELIGCTY
AID CODE NOT IN ELIGCAT       186         874,740.87
AID CODE NOT IN AFDCAID     6,964     162,024,982.22
MEMBER MONTHS NOT NUMERI
MEMBER MONTHS = ZERO
PAYMENT NOT NUMERIC
PAYMENT = ZERO                 8
PAYMENT > 999999999.00
------------------------------------------------------------------------------------------------------------
TOTAL RECS DROPPED        13,305     618,147,147.95
# OF ENR RECS CONVERTED   12,025   2,995,566,581.21


------------------------------------------------------------------------------------------------------------
```

## Attachment 2.   Sample Failed Operations Log (FOLOG) Report

```
MEDFOLO                                    MEDI-CAL                                  PAGE :    1
                                EXTERNAL FOLOG REPORT - CAPITATION CONVERT          DATE : 10/22/1998
                                                                                    TIME : 13:09:26
INPUT FILE      : CAPITATION CONVERT
NUMBER OF RECORDS :       9,544                                    TOTAL NETPAY : $          0.00
----------------------------------------------------------------------------------------------------
FIELD                   OPR OPERATION              FIELD                 %OF TOT       NETPAY  %OF TOT
NAME                    NO. DESCRIPTION            VALUE         COUNT  RECORDS        AMOUNT  NETPAY
----------------------------------------------------------------------------------------------------
----------------------------------------------------------------------------------------------------
TOTAL NUMBER OF FAILURES            :            0
TOTAL NUMBER OF OPERATIONS          :            6
AVERAGE FAILURES/OPERATION      :
AVERAGE FAILURES/RECORD         :
----------------------------------------------------------------------------------------------------

 XREF LIC/CLIA          10 PMF PROVLIC/CLIANUM      MISSING      64,529  13.8646         0.00  0.0000
                                                                 -----------------------------------------
                          TOTALS FOR THE OPR-NO  10 :            64,529  13.8646         0.00  0.0000
```

## Attachment 3.   Sample Unexpected Values Report

```
MDU120                                    MEDI-CAL                              PAGE :    1
                       UNEXPECTED VALUES REPORT - CAPITATION CONVERT            DATE : 08/12/1999
                                                                               TIME : 15:42:44
INPUT FILE      : CAPITATION CONVERT
NUMBER OF RECORDS :        19                                    TOTAL NETPAY : $          0.00
------------------------------------------------------------------------------------------------
FIELD           OPR OPERATION                   NEW FIELD      PHP      ERROR %OF TOT    NETPAY %OF TOT
NAME            NO. DESCRIPTION                    VALUE       CODE     COUNT RECORDS    AMOUNT NETPAY
------------------------------------------------------------------------------------------------
NETWORK-ID       2 MEDICAL PLAN                  *                         1  5.2632      0.00  0.0000
                                                  300                      1  5.2632      0.00  0.0000
                                                *  421                     1  5.2632      0.00  0.0000
                                                   985                     1  5.2632      0.00  0.0000
                                                              -------------------------------------
                       TOTALS FOR THE OPR-NO   2 :                         4 21.0526      0.00  0.0000

SERVICE DATE     3 SERVICE DATE                   001997                   1  5.2632      0.00  0.0000
                                                              -------------------------------------
                       TOTALS FOR THE OPR-NO   3 :                         1  5.2632      0.00  0.0000
```

## Attachment 4.   CRCCAPP1 – Capitation Payment Input File Layout

```
000010***************************************************************
000020* CRCCAPP1                                                    *
000030*                                                             *
000040* THIS IS THE CAPITATION PAYMENT RECORD FOR THE CONVERT       *
000050* REPLACE THIS WITH THE RAW DATA RECORD LAYOUT FROM THE       *
000060* DATA MANAGER - 56 CHAR. LONG                                *
000070***************************************************************
        05  :PFX:-PHP-CODE               PIC X(03).
        88  :PFX:-DROP-PHP-CODE-TRUE    VALUE '681' THRU '684'
                                              '400' THRU '408'.
IR1231*PATCH TO DROP DENTAL RECORDS FROM CONSIDERATION.
        05  :PFX:-PAYMENT-DATE.
           15  :PFX:-PAYMENT-YEAR     PIC X(04).
           15  :PFX:-PAYMENT-MONTH    PIC X(02).
           15  :PFX:-PAYMENT-DAY      PIC X(02).
        05  :PFX:-SERVICE-DATE.
           15  :PFX:-SERVICE-MONTH    PIC X(02).
           15  :PFX:-SERVICE-YEAR     PIC X(04).
        05  :PFX:-PHP-COUNTY          PIC 9(02).
        05  :PFX:-AID-CODE            PIC X(02).
        05  :PFX:-ADJUSTMENT-INDICATOR  PIC X(01).
        05  :PFX:-NBR-MEMBER-MNTHS     PIC 9(07).
        05  :PFX:-PAYMENT             PIC 9(10)V99.
        05  FILLER                    PIC X(15).
```

## Attachment 5.   CRCCAPP2 – Capitation Load File Layout

```
000100***************************************************************
000200*  CRCCAPP2                                                   *
000300*                                                             *
000400*  THIS IS THE OUTPUT RECORD FOR THE CAPITATION PAYMENT CONVERT *
000400*  IT IS USED TO LOAD THE DATASCAN TABLE                      *
000500***************************************************************
       01  CAPP-CONVERT-RECORD.
IR1034*NEW FIELD.
          05  CAPCV-ADJ-CAP          PIC X(01).
          05  CAPCV-ADJ-IND          PIC S9(01)V COMP-3.
          05  CAPCV-AID-CODE         PIC X(02).
          05  CAPCV-CLAIM-TYPE       PIC X(01).
          05  CAPCV-COUNTY-CD        PIC S9(02)V COMP-3.
          05  CAPCV-DENTAL-PLAN-CD   PIC X(03).
          05  CAPCV-ELIG-CAT         PIC X(02).
          05  CAPCV-MEMBER-MONTHS    PIC S9(07)V COMP-3.
          05  CAPCV-NET-PAY-AMT      PIC S9(09)V COMP-3.
          05  CAPCV-NETWORK-ID       PIC X(03).
          05  CAPCV-PD-DATE          PIC X(10).
          05  CAPCV-PHP-CODE         PIC X(03).
          05  CAPCV-PROV-SPEC        PIC X(02).
          05  CAPCV-PROVIDER-CNTY    PIC S9(02)V COMP-3.
          05  CAPCV-SVC-CAT          PIC S9(04) COMP.
          05  CAPCV-SVC-DT           PIC X(10).
          05  CAPCV-VENDOR-CD        PIC X(02).
          05  CAPCV-PV-RUNDATE       PIC X(10).
```

## Attachment 6.   Field Level Detail

The field-level specifications that follow this document are in alphabetical order by output field name.

When reviewing the field level detail of the Data Enhancement Functional Specifications, assume that Selection/Drop criteria section specified in this background document has been executed and the record has *not* been dropped.